

Application No.: 10/686800  
Docket No.: AD6651USCNT

Page 2

Amendments to Claims

Claim 1 (Cancel)

Claim 2 (Cancel)

Claim 3 (Cancel)

Claim 4 (Cancel)

Claim 5 (Cancel)

Claim 6 (Cancel)

Claim 7 (Cancel)

Claim 8 (Cancel)

Claim 9 (Cancel)

Claim 10 (Cancel)

11. (New) A method of laser welding, comprising the steps of :

preparing a first molded article of a first thermoplastic resin composition comprising a thermoplastic resin and a 1:2 metallic azo complex dye, which composition is transparent to a laser beam, and a second molded article of a second thermoplastic resin composition that is opaque to the laser beam,

positioning said first molded article and said second molded article in contact with each other, and

transmitting a predetermined amount of laser beam energy focused on the area of contact through the first article to the second article.

12. (New) A method of laser welding, comprising the steps of :

preparing a first molded article of a first thermoplastic resin composition comprising a thermoplastic resin and a black colorant, which composition is transparent to a laser beam, and a second molded article of a second thermoplastic resin composition that is opaque to the laser beam,

positioning said first molded article and said second molded article in contact with each other, and

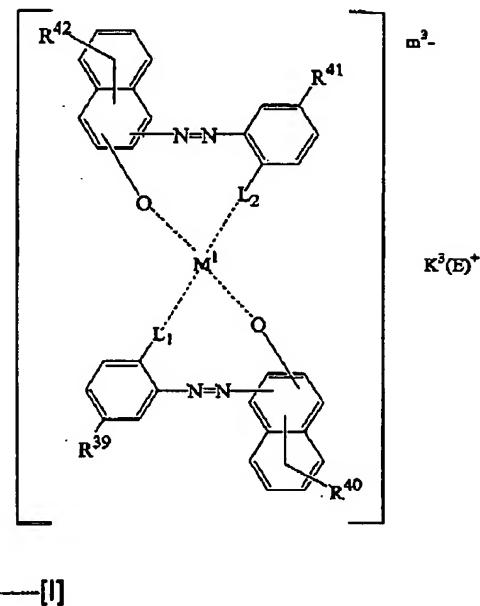
transmitting a predetermined amount of laser beam energy focused on the area of contact through the first article to the second article,

wherein the black colorant is at least one 1:2 metallic azo complex dye of the following formulas:

the formula [I]

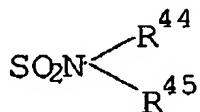
Application No.: 10/686800  
 Docket No.: AD6651USCNT

Page 3



—[I]

wherein  $\text{R}^{39}$ ,  $\text{R}^{41}$ , which may be the same or different, are Cl,



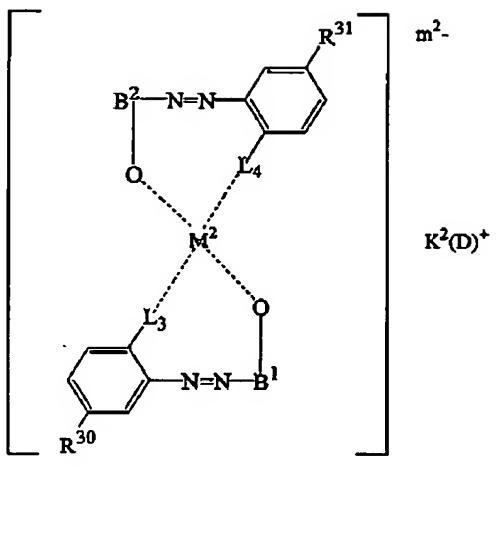
, or  $\text{SO}_2\text{R}^{43}$ ,  $\text{R}^{44}$ ,  $\text{R}^{45}$ , which may be the same or different, are independently hydrogen atom, linear or branched C1-C4 alkyl,  $\text{R}^{43}$  is linear or branched C1-C4 alkyl,  $\text{R}^{40}$ ,  $\text{R}^{42}$ , which may be the same or different, are hydrogen, linear or branched C1-C18 alkyl group, linear or branched C2-C18 alkenyl group, sulfonamide group, carboxyl group, mesyl group, hydroxyl group, C1-C18 alkoxy group, acethylamino group, benzoylamino group, a halogen atom or -CONH-R<sup>46</sup>,  $\text{R}^{46}$  is functional group selected from unsubstituted or substituted linear or branched C1-C18 alkyl or unsubstituted substituted C6-C18 aryl group,  $\text{L}_1$  and  $\text{L}_2$  are independently O or COO,  $(\text{E})^+$  are H<sup>+</sup>; cation of alkali metal, ammonium ion, cations of organic amine including aliphatic primary, secondary and tertiary amines, quaternary ammonium ion,  $\text{K}^3$  is an integer,  $\text{m}^3$  is 0, 1 or 2,

$\text{M}^1$  is a metal having coordination numbers of from 2 to 4,

Application No.: 10/686800  
Docket No.: AD6651USCNT

Page 4

the formula [III]

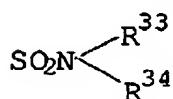


—[III]

Application No.: 10/686800  
 Docket No.: AD6651USCNT

Page 5

wherein R<sup>30</sup> and R<sup>31</sup>, which may be the same or different, are Cl,



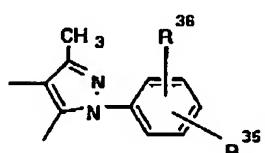
SO<sub>2</sub>R<sup>32</sup>, or H,

R<sup>33</sup> and R<sup>34</sup>, which may be the same or different, are independently hydrogen atom, linear or branched C1-C4alkyl,

R<sup>32</sup> is linear or branched C1-C4 alkyl, L<sub>3</sub> and L<sub>4</sub> are independently O or COO, (D)<sup>+</sup> is hydrogen ion, cation of alkali metals, ammonium ion, cations of organic amine including aliphatic primary, secondary and tertiary amines, quaternary ammonium ion,

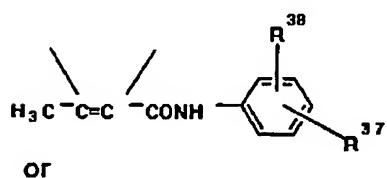
K<sup>2</sup> is an integer, m<sup>2</sup> is 0, 1 or 2,

M<sup>2</sup> is metals having coordination numbers of from 2 to 4,



B is represented by formula

—[III]

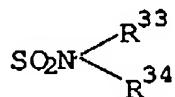


—[IV]

Application No.: 10/686800  
 Docket No.: AD6651USCNT

Page 6

wherein R<sup>35</sup> and R<sup>37</sup>, which may be the same or different, are Cl,

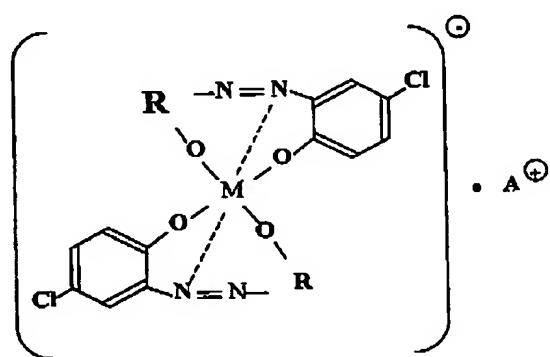


, SO<sub>2</sub>R<sup>32</sup>, or H,

R<sup>33</sup> and R<sup>34</sup>, which may be the same or different, are independently hydrogen atom, linear or branched C1-C4 alkyl, and R<sup>36</sup> and R<sup>38</sup>, which may be the same or different, are independently hydrogen atom, linear or branched C1-C18 alkyl, carboxyl, hydroxyl, C1-C18 alkoxy, amino or halogen atoms.

13. (New) The method of Claim 11, wherein said 1:2 metallic azo complex dye is selected from the group consisting of:

formula (1)

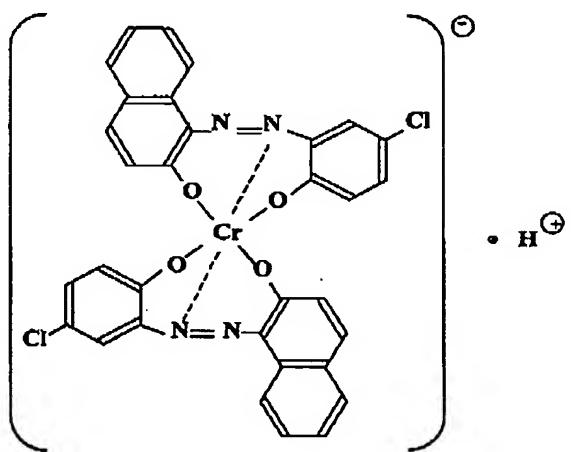


Application No.: 10/686800  
Docket No.: AD6651USCNT

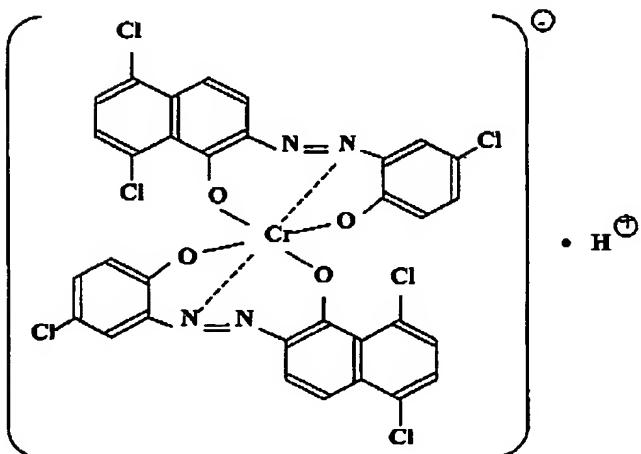
Page 7

wherein R is a residual group of a coupling agent, M is divalent or trivalent metal, and A is hydrogen, aliphatic amine with 4 to 18 carbon atoms, or alkylene oxide added amine;

or formula (2)



or formula (3)



Application No.: 10/686800  
Docket No.: AD6651USCNT

Page 8

14. (New) The method of Claim 12, wherein said 1:2 metallic azo complex dye is selected from formula (2) or formula (3).
15. (New) The method of Claim 12, wherein said 1:2 metallic azo complex dye is present in an amount of from 0.01 to 1% by weight based upon the total weight of the composition.
16. (New) The method of Claim 11, wherein the first thermoplastic resin composition and/or the second thermoplastic resin composition further comprises glass fiber or glass flake.
17. (New) The method of Claim 11, wherein the first thermoplastic resin composition and/or second thermoplastic resin composition comprises a polyamide resin.
- 18.(New) The method of Claim 11, wherein the first thermoplastic resin composition and/or second thermoplastic resin composition comprises a polyamide copolymer.
19. (New) The method of Claim 11, wherein the first thermoplastic resin composition and/or second thermoplastic resin composition comprises a blend of polyamide resins.
20. (New) The method of Claim 12, wherein M<sup>1</sup> is trivalent Cr, Fe, or Cu.
21. (New) The method of Claim 12, wherein M<sup>2</sup> is Zn, Sr, Cr, Al, Ti, Fe, Zr, Ni, Co, Mn, B, or Si.
22. (New) The method of Claim 12, wherein M<sup>2</sup> is trivalent Cr, Co, Cu, Ni, or Al.
23. (New) A shaped article formed by the method of Claim 11.